

Notice of Allowability

Application No.

10/553,905

Examiner

Brian L. Albertalli

Applicant(s)

TASHIRO ET AL.

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2 May 2007.
2. ☒ The allowed claim(s) is/are 2-7 and 9-14.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Allowable Subject Matter

1. Claims 2-7 and 9-14 are allowed.
2. The following is an examiner's statement of reasons for allowance:

In regard to currently amended claims 4 and 11, Applicant's arguments are persuasive. Upon further consideration, Kapilow does not disclose or suggest that the position controlling includes determining, when a segment cannot be further shifted toward the oldest period signal data sequence, the segment at a position adjacent to the oldest periodic signal data sequence. Kapilow discloses that the segment is shifted towards the oldest periodic signal data sequence (see Fig. 15), and when the segment cannot be further shifted toward the oldest period signal data sequence, the index is rolled back to the newest signal data, similar to a circular buffer. However, by shifting back to the newest signal data, this shift is not "adjacent to the oldest periodic signal data sequence", as required by claims 4 and 11.

In regard to currently amended claims 5 and 12, Applicant's arguments are persuasive. Upon further consideration, Kapilow does not disclose or suggest repeating a variation effected by a shift so long as erasure continues. Kapilow discloses that the segment is shifted towards the oldest periodic signal data sequence (see Fig. 15), and when the segment cannot be further shifted toward the oldest period signal data sequence, the index is rolled back to the newest signal data, similar to a circular buffer. However, Kapilow discloses that, as the erasure continues, the 3 periods of the pitch buffer are simply repeated for the duration of the erasure (see column 13, lines 3-8).

Thus, Kapilow does not repeat "a variation effected by a shift so long as the erasure continues", because the output during erasure would be a repetition of the pitch buffer every 3rd period.

Claims 3, 6, 10, and 13 were indicated as allowable in the previous Office Action. The reasons for allowance are repeated below:

In regard to claims 3 and 10, Kapilow does not disclose or suggest that a period shorter than a width of a segment to be used (i.e. the waveform segment to be used as a replacement) is used as an index. Kapilow discloses that the index is always shifted by a waveform period. That is, the period is equal to the width of the segment to be used, in order to preserve the phase (see column 12, lines 10-17). Furthermore, the additional prior art of record does not disclose or suggest this feature.

In regard to claims 6 and 13, Kapilow does not disclose that when the segment of the periodic signal data cannot be further shifted toward the oldest period signal data sequence, the segment is shifted toward the newest period data sequence. Kapilow discloses that when the segment cannot be further shifted toward the oldest period signal data sequence, the index is rolled back to the newest signal data, similar to a circular buffer. In contrast, claims 6 and 13 require changing the direction of the shifting (i.e. from shifting towards the oldest data to shifting towards the newest data) when the end of the buffer is reached. Furthermore, the additional prior art of record does not disclose or suggest this feature.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L. Albertalli whose telephone number is (571) 272-7616. The examiner can normally be reached on Mon - Fri, 8:00 AM - 5:30 PM, every second Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BLA 7/30/07


DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER